

**THIS OPINION WAS NOT WRITTEN FOR PUBLICATION**

The opinion in support of the decision being entered today  
(1) was not written for publication in a law journal and  
(2) is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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***Ex parte*** SEPTIMIU E. SALCUDEAN and ALLAN J. KELLEY

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Appeal No. 95-1357  
Application 07/965,427<sup>1</sup>

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ON BRIEF

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Before HAIRSTON, BARRETT, and FLEMING, ***Administrative Patent Judges***.

FLEMING, ***Administrative Patent Judge***.

**DECISION ON APPEAL**

This is a decision on appeal from the final rejection of  
claims 1 through 15. Claims 16 through 18 are objected to for

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<sup>1</sup>Application for patent filed October 23, 1992.

the reason that they depend from a rejected claim.

The invention relates to an electromagnetic system for the application of force feedback to a moveable platform of a controller. Appellants disclose on pages 4 through 7 of the specification that Figure 1 illustrates the main component of the controller of their invention. In particular, Figure 1 shows a controller 10 comprising a base 12, a platform 14 and a gantry 16 for mounting the platform 14 for a range of movement in a plane in each of two different directions. Appellants also disclose two force applying actuators 70 and 72. The force applying actuators include stationary permanent magnets 74 mounted on the base 12 and stationary permanent magnets 76 mounted on cover 13. Appellants disclose that each actuator includes a coil 90 mounted on the platform 14 in a position to cooperate with the magnets 74 and 76.

The only independent claim 1 is reproduced as follows:

1. A controller comprising:
  - a base,
  - a platform,
  - means for mounting said platform for a range of movement in a plane in each of two different directions,

Appeal No. 95-1357  
Application 07/965,427

a first magnetic force applying means including a first magnet means mounted on said base and a first cooperating magnetic force generating means mounted on and moveable with said platform in position to interact with said first magnet means,

a second magnetic force applying means including a second magnet means mounted on said base and a second cooperating magnetic force generating means mounted on and moveable with said platform in a position to interact with said second magnet means,

said first and said second magnet means being fixed relative to each other on said base and

said first and second cooperating magnet force generating means being fixed relative to each other on said platform,

said first force applying means being positioned and constructed to controllably apply selected forces to said platform in one of said two different directions and

said second force applying means being constructed and positioned to controllably apply selected forces to said platform in the other of said two different directions and

control means to selectively control said first and said second force applying means to generate said selected forces.

The Examiner relies on the following references:

Clark	4,692,756	Sep. 8, 1987
Cadoz et al. (Cadoz)	5,107,262	Apr. 21, 1992

Claims 1 through 15 stand rejected under 35 U.S.C. § 103 as

Appeal No. 95-1357  
Application 07/965,427

being unpatentable over Clark and Cadoz.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the briefs<sup>2</sup> and answers<sup>3</sup> for the respective details thereof.

#### **OPINION**

We will not sustain the rejection of claims 1 through 15 under 35 U.S.C. § 103.

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<sup>2</sup>Appellants filed an appeal brief on February 22, 1994. We will refer to this appeal brief as simply the brief. Appellants filed a reply appeal brief on June 15, 1994. We will refer to this reply appeal brief as the reply brief. The Examiner responded to the reply brief with a Supplemental answer, thereby entering and considering the reply brief.

<sup>3</sup>The Examiner responded to the brief with an Examiner's answer, dated May 18, 1994. We will refer to the Examiner's answer as simply the answer. The Examiner responded to the reply brief with a supplemental Examiner's answer, dated September 7, 1996. We will refer to the Supplemental Examiner's answer as simply the supplemental answer.

The Examiner has failed to set forth a ***prima facie*** case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the express teachings or suggestions found in the prior art, or by implications contained in such teachings or suggestions. ***In re Sernaker***, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." ***Para-Ordnance Mfg. v. SGS Importers Int'l, Inc.***, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), ***cert. denied***, 117 S.Ct. 80 (1996) ***citing W. L. Gore & Assocs., Inc. v. Garlock, Inc.***, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), ***cert. denied***, 469 U.S. 851 (1984).

Appellants argue on pages 5 through 8 of the brief that Clark and Cadoz, together or individually, fail to teach or suggest a first and second magnetic force applying means comprising coils fixed in spaced relationship to the platform and a pair of magnets fixed to the base in a relationship so that the first and second magnetic force applying means apply selected

forces to move the platform in one of two different directions. Appellants further emphasize in the reply brief that neither reference teaches the specific structure claimed of mounting two magnets in fixed relationship to a base and two coils in fixed relationship on a platform.

We note that Appellants' claim 1 recites the following:

said first and said second magnet means being fixed relative to each other on said base and said first and said second cooperating magnet force generating means being fixed relative to each other on said platform, said first force applying means being positioned and

constructed to controllably apply selected forces to said platform in one of said two different directions and said second force applying means being constructed and positioned to controllably apply selected forces to said platform in the other of said two different directions and control means to selectively control said first and said second force applying means to generate said selected forces.

Upon a careful review of Clark and Cadoz, we fail to find that the references teach a controller having the above limitations as recited in Appellants' claim 1.

Furthermore, we fail to find any suggestion of modifying Clark with the Cadoz magnetic force applying means to provide a controller as recited in Appellants' claim 1. The Federal Circuit states that "[t]he mere fact that the prior art may be

Appeal No. 95-1357  
Application 07/965,427

modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." ***In re Fritch***, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), ***citing In re Gordon***, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." ***Para-Ordnance Mfg.***, 73 F.3d at 1087, 37 USPQ2d at 1239, ***citing W. L. Gore***, 721 F.2d at 1551, 1553, 220 USPQ at 311, 312-13.

We have not sustained the rejection of claims 1 through 15 under 35 U.S.C. § 103. Accordingly, the Examiner's decision is reversed.

**REVERSED**

KENNETH W. HAIRSTON )  
Administrative Patent Judge )  
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Appeal No. 95-1357  
Application 07/965,427

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Appeal No. 95-1357  
Application 07/965,427

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